

Chain A, Structure Of Taq Dna Polymerase

PDB: 1TAQ_A

[FASTA Graphics](#)

•	Comment	
•	Features	
•	Sequence	
LOCUS	1TAQ_A	832 aa linear BCT 24-SEP-2008
DEFINITION	Chain A, Structure Of Taq Dna Polymerase.	
ACCESSION	1TAQ_A	
VERSION	1TAQ_A GI:157833899	
DBSOURCE	pdb: molecule 1TAQ, chain 65, release Aug 27, 2007; deposition: Jun 4, 1996; class: Nucleotidyltransferase; source: Mol_id: 1; Organism_scientific: Thermus Aquaticus; Gene: Taq; Expression_system: Escherichia Coli; Exp. method: X-Ray Diffraction.	
KEYWORDS	.	
SOURCE	Thermus aquaticus	
ORGANISM	Thermus aquaticus Bacteria; Deinococcus-Thermus; Deinococci; Thermales; Thermaceae; Thermus.	
REFERENCE	1 (residues 1 to 832)	
AUTHORS	Lawyer,F.C., Stoffel,S., Saiki,R.K., Myambo,K., Drummond,R. and Gelfand,D.H.	
TITLE	Isolation, characterization, and expression in Escherichia coli of the DNA polymerase gene from Thermus aquaticus	
JOURNAL	J. Biol. Chem. 264 (11), 6427-6437 (1989)	
PUBMED	2649500	
REFERENCE	2 (residues 1 to 832)	
AUTHORS	Kim,Y., Eom,S.H., Wang,J., Lee,D.S., Suh,S.W. and Steitz,T.A.	
TITLE	Crystal structure of Thermus aquaticus DNA polymerase	
JOURNAL	Nature 376 (6541), 612-616 (1995)	
PUBMED	7637814	
REFERENCE	3 (residues 1 to 832)	
AUTHORS	Eom,S.H., Wang,J. and Steitz,T.A.	
TITLE	Structure of Taq polymerase with DNA at the polymerase active site	
JOURNAL	Nature 382 (6588), 278-281 (1996)	
PUBMED	8717047	
REFERENCE	4 (residues 1 to 832)	
AUTHORS	Kim,Y., Eom,S.H., Wang,J., Lee,D.-S., Suh,S.W. and Steitz,T.A.	
TITLE	Direct Submission	
JOURNAL	Submitted (04-JUN-1996)	
COMMENT	SEQRES.	
ORIGIN	1 mrgmlplfep kgrvllvdgh hlayrtfhal kglttsergep vqavygfaks llkalkedgd 61 avivvfdaka psfrheaygg ykagraptpe dfprqlalik elvdllglar levpgyeadd 121 vlaslakkae kegyevrilt adkdlyqls drihvlhpeg ylitpawlwe kyglrpdqwa 181 dyraltgdes dnlpvgkgig ektarkllee wgsleallkn ldrlkpaire kilahmddlk 241 lswdlakvrt dlplevdfak rrepdrerlr aflerlefgs llhefglles pkaleeapwp 301 ppegafvgfv lsrkepmwad llalaaargg rvhrapepyk alrdlkearg llakdlsvla 361 lreglglppg ddpmllyll dpsnttpegv arryggewte eageraalse rlfanlwgrl	

```

421 egeerllwly reverplsav lahmeatgvr ldvaylrals levaeeiarl eaevfrlagh
481 pfnlnsrdql ervlfdelgl paigktektg krstsaavle alreahpive kilqyreltk
541 lkstyidplp dlihprrtgrl htrfnqtata tgrlcccdpn lqnipvrtp l gqrrrrgfa
601 eegwllvald ysqiellrvla hlsgdenlir vfgqgrdiht etaswmfvgp reavdplmrr
661 aaktinfgvl ygmsahrslsq elaipyeeaq afieryfqsf pkvrawiekt leegrrrrgyv
721 etlfgrrrryv pdlearvksv reaaermafn mpvqgtaadl mklamvklfp rleemgarm l
781 lqvhdelvle apkeraeava rlakevmegv yplavpleve vgigedwlsa ke

```

DNA polymerase I [Geobacillus stearothermophilus]

GenBank: AAB52611.1

FASTA Graphics

•	Features				
•	Sequence				
LOCUS	AAB52611	876 aa	linear	BCT 21-APR-1997	
DEFINITION	DNA polymerase I [Geobacillus stearothermophilus].				
ACCESSION	AAB52611				
VERSION	AAB52611.1 GI:1205984				
DBSOURCE	locus BSU33536 accession <u>U33536.1</u>				
KEYWORDS	.				
SOURCE	Geobacillus stearothermophilus				
ORGANISM	Geobacillus stearothermophilus				
	Bacteria; Firmicutes; Bacillales; Bacillaceae; Geobacillus.				
REFERENCE	1 (residues 1 to 876)				
AUTHORS	Aliotta,J.M., Pelletier,J.J., Ware,J.L., Moran,L.S., Benner,J.S. and Kong,H.				
TITLE	Thermostable Bst DNA polymerase I lacks a 3'-->5' proofreading exonuclease activity				
JOURNAL	Genet. Anal. 12 (5-6), 185-195 (1996)				
PUBMED	<u>8740835</u>				
REFERENCE	2 (residues 1 to 876)				
AUTHORS	Kong,H.				
TITLE	Direct Submission				
JOURNAL	Submitted (04-AUG-1995) Huimin Kong, Research Department, New England Biolabs, 32 Tozer Road, Beverly, MA 01915, USA				
COMMENT	Method: conceptual translation.				
ORIGIN	<pre> 1 mkkklvlidg nsvayraffa lpllhndkgi htnavygftm mlnkilaeq pthllvafda 61 gkttfrhetf qeykggrqqt ppelseqfpl lrellkayri payeldhyea ddiigtlaar 121 aegegfevki isgdrdltql asrhvtdit kkgitdiepy tpetvrekyl ltpeqidvdk 181 glmgdksdni pgvpgigekt avkllkqfgt venvlaside vkgeklkenl rqhrdlalls 241 kqlasicrda pvelslldiv yegqdreksi alfkelfgfs flekmaapaa egekpleeme 301 faivdvitee mladkaalvv evmeenyhda pivgialvne hgrffmrpet aladsqflaw 361 ladetkkksm fdakravval kwkgielrgv afdlllaayl lnpaqdagdi aavakmkqye 421 avrsdeavvg kgvkrslpde qtlaelhrk aaaiwaleqp fmddlrnneq dqlltklegp 481 laaailaemef tgvnvdtkrl eqmgselaeq lraieqriye lagqefnins pkqlgvilfe 541 klqlpvllkt ktgystsadv leklaphhei venilhyrql gklqstyieg llkvvrpdtg 601 kvhtmfngal tqtgrlssae pnlqnipirl eegrkirqaf vpsepdwlif aadysqiellr 661 vlahiaddn lieafqrdld ihtktamdif hvseeevtan mrrqakavnf givygisdvg 721 laqlnlnitrk eaaefieryf asfpgvkqym enivqeakqk gyvtllhrr rylpditsrn 781 fnvrsfaert amntpiqgsa adiikkamid laarlkeeql qarlllqvhd elileapkee 841 ierlcelvpe vmeqavtlrv plkvdyhygp twydak </pre>				

